

## ABSTRACT

A rotor assembly includes at least one superconducting winding assembly positioned within a cryogenic region of the rotor assembly, and a cantilevered member, 5 mechanically coupled between the at least one superconducting winding assembly and the shaft. The cantilevered member extends between the non-cryogenic region and cryogenic region of the rotor assembly. The at least one superconducting winding assembly, in operation, generates a magnetic flux linking the stator assembly.

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